

C style string functions

Write and test the string functions below as described. You may not use any string functions built into c++ to complete this assignment.

`stringCopy` – takes 2 c-style string arguments. The first argument is the destination string. The second argument is the source string. The contents of the source should be copied into the destination. Be sure the `\0` is copied to the end of the destination.

`stringAppend` – takes 2 c-style string arguments. The first argument is the destination string. The second argument is the source string. The contents of the source should be copied to the end of the destination. Be sure the `\0` is copied to the new end of the destination.

`stringLength` – takes 1 c-style string as an argument. Returns an integer containing the number of characters in the string before the `\0`.

`stringReverse` – takes 1 c-style string as an argument. All of the characters in the string should be rearranged to be in the opposite order.

`stringsMatch` - takes 2 c-style string arguments. The function should return a Boolean value. True if the strings have the same characters and the same length, false otherwise.

The main function should contain enough logic to test all of the string functions you are required to write. The test functions should be well documented and easy to determine if the test succeeded.

Optional:

`stringContains` –takes 2 c-style string arguments. The first argument is the string to look in. The second argument is the target string to look for. The function should return a Boolean value. True if the string contains the target and false otherwise.